ABSTRACT OF THE DISCLOSURE

A robot flexure correction device and method in which flexure amount correction can be automatically performed on taught points. For each robot model and for each of loads that are different in weight and center-of-gravity position, flexure amounts representing deviations of a robot front end are measured at a plurality of positions in a robot operating area, and stored as flexure amount data. When a robot is used, flexure amount data about the model of the used robot and about the load that is close in weight and center-of-gravity position to a used tool is designated from flexure amount data 1-1 to 1-m with a designation means. A program is designated from programs 2-1 to 2-n with an operation program designation means. With a flexure amount calculation means, a flexure amount for each of taught point positions/orientations in the program is calculated using the flexure amount data. With a position change means, each of the taught point positions/orientations is corrected on the basis of the obtained flexure amount. Thus, a corrected program is obtained. Flexure amount data only needs to be created once by a robot maker or the like. Only by designating flexure amount data on the basis of the weight and center-of-gravity position of a tool to be used, a user can automatically obtain a program corrected in view of flexure amount.